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nGPCR-60. Table 1 below identifies the novel gene sequence nGPCR-x designation, the SEQ ID NO: of the gene sequence, the SEQ ID NO: of the polypeptide encoded thereby, and the U.S. Provisional Application in which the gene sequence has been disclosed.

Table 1

nGPCR	Nucleotide Sequence (SEQ ID NO:)	Amino acid Sequence (SEQ ID NO:)	Originally filed in:	nGPCR	Nucleotide Sequence (SEQ ID NO:)	Amino acid Sequence (SEQ ID NO:)	Originally filed in:
1	1	2	A	32	39	40	B
1	73	74	E	33	41	42	C
3	3	4	A	34	43	44	C
3	185	186	P	35	45	46	C
4	5	6	A	36	47	48	C
5	7	8	A	37	49	50	C
5	75	76	F	38	51	52	C
9	9	10	A	40	53	54	C
9	77	78	G	40	83	84	J
11	11	12	A	41	55	56	C
11	79	80	H	53	57	58	D
12	13	14	A	54	59	60	D
14	15	16	A	54	85	86	K
15	17	18	A	55	61	62	D
18	19	20	A	56	63	64	D
16	21	22	B	56	87	88	L
16	81	82	I	56	89	90	M
17	23	24	B	57	65	66	D
20	25	26	B	58	67	68	D
21	27	28	B	58	91	92	N
22	29	30	B	58	93	94	O
24	31	32	B	59	69	70	D
27	33	34	B	60	71	72	D
28	35	36	B				
31	37	38	B				

Legend

10 A= Ser. No. 60/165,838
 B= Ser. No. 60/166,071
 C= Ser. No. 60/166,678
 D= Ser. No. 60/173,396
 E= Ser. No. 60/184,129
 F= Ser. No. 60/188,114
 G= Ser. No. 60/185,421
 15 H= Ser. No. 60/186,811

I= Ser. No. 60/186,530
 J= Ser. No. 60/207,094
 K= Ser. No. 60/203,111
 L= Ser. No. 60/190,310
 M= Ser. No. 60/201,190
 N= Ser. No. 60/185,554
 O= Ser. No. 60/190,800
 P= Ser. No. 60/198,568

When a specific nGPCR is identified (for example nGPCR-5), it is understood that only that specific nGPCR is being referred to.

As described in Example 4 below, the genes encoding nGPCR-1 (nucleic acid
 20 sequence SEQ ID NO: 1, SEQ ID NO: 73, amino acid sequence SEQ ID NO: 2, SEQ ID NO: 74), nGPCR-9 (nucleic acid sequence SEQ ID NO: 9, SEQ ID NO: 77, amino acid sequence SEQ ID NO: 10, SEQ ID NO: 78), nGPCR-11 (nucleic acid sequence

SEQ ID NO:11, SEQ ID NO:79, amino acid sequence SEQ ID NO:12, SEQ ID NO:80), nGPCR-16 (nucleic acid sequence SEQ ID NO: 21, SEQ ID NO:81, amino acid sequence SEQ ID NO: 22, SEQ ID NO:82), nGPCR-40 (nucleic acid sequence SEQ ID NO:53, SEQ ID NO:83, amino acid sequence SEQ ID NO:54, SEQ ID NO:84), nGPCR-54 (nucleic acid sequence SEQ ID NO:59, SEQ ID NO:85, amino acid sequence SEQ ID NO:60, SEQ ID NO: 86), nGPCR-56 (nucleic acid sequence SEQ ID NO:63, SEQ ID NO:87, SEQ ID NO:89, amino acid sequence SEQ ID NO:64, SEQ ID NO: 88, SEQ ID NO:90), nGPCR-58 (nucleic acid sequence SEQ ID NO:67, SEQ ID NO:91, SEQ ID NO:93, amino acid sequence SEQ ID NO:68, SEQ ID NO: 92, SEQ ID NO:94) and nGPCR-3 (nucleic acid sequence SEQ ID NO:3, SEQ ID NO:185, amino acid sequence SEQ ID NO:4, SEQ ID NO: 186) have been detected in brain tissue indicating that these n-GPCR-x proteins are neuroreceptors.

The invention provides purified and isolated polynucleotides (*e.g.*, cDNA, genomic DNA, synthetic DNA, RNA, or combinations thereof, whether single- or double-stranded) that comprise a nucleotide sequence encoding the amino acid sequence of the polypeptides of the invention. Such polynucleotides are useful for recombinantly expressing the receptor and also for detecting expression of the receptor in cells (*e.g.*, using Northern hybridization and *in situ* hybridization assays). Such polynucleotides also are useful in the design of antisense and other molecules for the suppression of the expression of nGPCR-x in a cultured cell, a tissue, or an animal; for therapeutic purposes; or to provide a model for diseases or conditions characterized by aberrant nGPCR-x expression. Specifically excluded from the definition of polynucleotides of the invention are entire isolated, non-recombinant native chromosomes of host cells. A preferred polynucleotide has the sequence of the sequence set forth in odd numbered sequences ranging from SEQ ID NO: 1 to SEQ ID NO: 93 and SEQ ID NO: 185, which correspond to naturally occurring nGPCR-x sequences. It will be appreciated that numerous other polynucleotide sequences exist that also encode nGPCR-x having the sequence set forth in even numbered sequences ranging from SEQ ID NO: 2 to SEQ ID NO: 94 and SEQ ID NO: 186, due to the well-known degeneracy of the universal genetic code.

The invention also provides a purified and isolated polynucleotide comprising a nucleotide sequence that encodes a mammalian polypeptide, wherein the polynucleotide hybridizes to a polynucleotide having the sequence set forth in odd numbered sequences ranging from SEQ ID NO: 1 to SEQ ID NO: 93 and SEQ ID

774; Uhl & Reiser. (1997) *Glia* 21:361-369; Grabham & Cunningham (1995) *J Neurochem* 64:583-591.

nGPCR-x receptor activation may mediate neuronal and astrocyte apoptosis and prevention of neurite outgrowth. Inhibition would be beneficial in both chronic and acute brain injury. See, *e.g.*, Donovan *et al.* (1997) *J Neurosci* 17:5316-5326; Turgeon *et al.* (1998) *J Neurosci* 18:6882-6891; Smith-Swintosky *et al.* (1997) *J Neurochem* 69:1890-1896; Gill *et al.* (1998) *Brain Res* 797:321-327; Suidan *et al.* (1996) *Semin Thromb Hemost* 22:125-133.

The attached Sequence Listing contains the sequences of the polynucleotides and polypeptides of the invention and is incorporated herein by reference in its entirety.

As described above and in Example 4 below, the genes encoding nGPCR-1 (nucleic acid sequence SEQ ID NO: 1, SEQ ID NO: 73, amino acid sequence SEQ ID NO: 2, SEQ ID NO:74), nGPCR-9 (nucleic acid sequence SEQ ID NO:9, SEQ ID NO:77, amino acid sequence SEQ ID NO:10, SEQ ID NO:78), nGPCR-11 (nucleic acid sequence SEQ ID NO:11, SEQ ID NO:79, amino acid sequence SEQ ID NO:12, SEQ ID NO:80), nGPCR-16 (nucleic acid sequence SEQ ID NO: 21, SEQ ID NO:81, amino acid sequence SEQ ID NO: 22, SEQ ID NO:82), nGPCR-40 (nucleic acid sequence SEQ ID NO:53, SEQ ID NO:83, amino acid sequence SEQ ID NO:54, SEQ ID NO:84), nGPCR-54 (nucleic acid sequence SEQ ID NO:59, SEQ ID NO:85, amino acid sequence SEQ ID NO:60, SEQ ID NO: 86), nGPCR-56 (nucleic acid sequence SEQ ID NO:63, SEQ ID NO:87, SEQ ID NO:89, amino acid sequence SEQ ID NO:64, SEQ ID NO: 88, SEQ ID NO:90), nGPCR-58 (nucleic acid sequence SEQ ID NO:3, SEQ ID NO:185, amino acid sequence SEQ ID NO:4, SEQ ID NO: 186) have been detected in brain tissue indicating that these n-GPCR-x proteins are neuroreceptors. The identification of modulators such as agonists and antagonists is therefore useful for the identification of compounds useful to treat neurological diseases and disorders. Such neurological diseases and disorders, including but are not limited to, schizophrenia, affective disorders, ADHD/ADD (*i.e.*, Attention Deficit-Hyperactivity Disorder/Attention Deficit Disorder), and neural disorders such as Alzheimer's disease, Parkinson's disease, migraine, and senile dementia as well as depression, anxiety, bipolar disease, epilepsy, neuritis, neurasthenia, neuropathy, neuroses, and the like.

ACTCCTCGGTGCTGTTTCAGGTGTTTCTGGAATGGATCTTCTAGTTTCTGCTGGTAGATCCAGGAAGCATTC
TGAAGTTTTTCCATCCCTGA

The following amino acid sequence <SEQ ID NO. 18> is the predicted amino acid sequence derived from the DNA sequence of SEQ ID NO. 17:

SGMEKLQNASWIYQQKLEDPPQKHLNSTEYLAFLCGPRRSHFFLPVSVVYVPIFVVGVIGNVLVCLVILQHQ
AMKTPNTYYLFS~~LA~~VS~~DL~~LV~~LL~~LGMPLE~~VY~~EMWRNYPFLFGPVGCYFK~~TAL~~FETVCFASILSITTVSVERYVA
ILHPFRAKLQSTRRRALRILGIVWGF~~SV~~LSLPNTSIHG~~IK~~FHYFPNGSLVPGSATCTVIKPMWIYNFIQVT
SFLFYLLPMTVISVLYLMALRVSIAGVAG

The following DNA sequence beGPCR-~~seq~~18 <SEQ ID NO. 19> was identified in *H. sapiens*:

ATCAAGATGATTTTTGCTATCGTGCAAATTATTGGATTTTCCAACCTCATCTGTAATCCCATTTGCTATGC
ATTTATGAATGAAAAC~~TT~~CAAAAAAATGTTTTGTCTGCAGTTTGTATTGCATAGTAAATAAAACCTTCT
CTCCAGCACAAGGCATGGAAATTCAGGAATTACAATGATGCGGAAGAAAGCAAAGTTTTCCCTCAGAGAG
AATCCAGTG

The following amino acid sequence <SEQ ID NO. 20> is the predicted amino acid sequence derived from the DNA sequence of SEQ ID NO. 19:

IKMIFAIVQIIGFSNSICNPIVYAFMNENFKKNVLSAVCYCIVNKTFS~~PAQR~~HGNSGITMMRK~~KAK~~PSLREN~~P~~

The following DNA sequence beGPCR-~~seq~~16 <SEQ ID NO. 21> was identified in *H. sapiens*:

GCCACAGCATGCAGTTTTCTGTAGAATTCACCTTTGTCTTTGCACTTGAAGAAGATGAGGTATCTGGTGAC
CAGGATCACCATAGAAATAGGAACCGTGAGGTACATGTGGATGTGCAGCATGGCACTCACAAATTTGCAG
AAGGGCAGCCCAAACATCCAAGTCTTCTTGATGAGGTAGGTCAAGCGAAATGGCACTGTGCAGCAGAAAAAC
GCTGTGGACCACCACCAAGTTAATGACCGCCATGGTGGTCACTGACCGGGTGTTCATTTTACCAGGAGGA
AAAGAATGGAAATGACACCCACCAGCCCGCCAATAAGCACTATGAAGTAGAGGCTGATTAAGTGGGGTGTG
ACTATAGGATCGCAAGAGGAATCCTGGAGGTATTGTGGCCAGGCATACTTGGGAAGTCACCTGGAGGAGA
AAAAGCACCAGAGTAACTGAC

The following amino acid sequence <SEQ ID NO. 22> is the predicted amino acid sequence derived from the DNA sequence of SEQ ID NO. 21:

VSYS~~GA~~FSPPGDFPSPMPGHNTSRNSSCDPIVTPHLISLYFIVLIGGLVGVISILFLLVKMNT~~RSV~~TTMAVINL
VVVH~~SF~~LLTV~~PF~~RLTYLIKKTW~~MF~~GLPFCKFVSAMLHIHMYLTVPILCGDPGHQIPHLLQVQRQSGILQKTA
CCG

The following DNA sequence beGPCR-~~seq~~17 <SEQ ID NO. 23> was identified in *H. sapiens*:

ACTGACCAAGGTCAGGGCATCGACTGAGGCTAGAAGGCCACAGGAAATGCCAGTCAAGGTGTTGGCGCCTG
CAATCGCACCTACCACAACTTGACCGGGGGCAGGGGGGCAGGCCCGCCAGCGAACACGGTCAGCAGCACC
AGTCCATGTCAGAGCACGGAGAGCAACACGATGGCCACACGGCCAGGCGGATGCCCCAGCTTTCAAAGAG
GTACTCACA

The following amino acid sequence <SEQ ID NO. 24> is the predicted amino acid sequence derived from the DNA sequence of SEQ ID NO. 23:

CEYLFESWGIR~~LA~~VWAI~~VLL~~SVLCNGLVLLTVFAGGPAPLPVKFVVGA~~IAGANT~~LTGISCGLLASVDAL~~TLV~~
S

The following DNA sequence beGPCR-~~seq~~20 <SEQ ID NO. 25> was identified in *H. sapiens*:

AACCCCATCATCTACACGCTCACCAACCGCGACCTGCGCCACGCGCTCCTGCGCCTGGTCTGCTGCGGACG
CCACTCCTGCGGCAGAGACCCGAGTGGCTCCACGAGTCGCGGAGCGCGGCTGAGGCTTCCGGGGGCTGCG

CATCGTGCTAGAGAATCTAGCCGTGTTGTTGGTGCTCGGACGCCACCCGCGCTTCCACGCTCCCATGTTTCCTG
 CTCCTGGGACAGCTCACGTTGTGCGATCTGCTGGCAGGCGCGCCTACGCCGCCAACATCTACTGTGCGGGGC
 CGCTCACGCTGAAACTGTCCCGCGCTCTGTTTCGCACGGGAGGGAGGCGTCTTCGTGGCACTACTGCGTC
 CGTGCTGAGCCTCCTGGCCATCGCGCTGGAGCGCAGCCTCACCATGGCGCGCAGGGGGCCGCGCCGTCTCC
 AGTCGGGGGCGCACGCTGGCGATGGCAGCCGCGGCTGGGGCGTGTGCTGCTCCTCGGGCTCCTGCCAGCGC
 TGGGCTGGAATTGCTGGGTGCGCTGGACGCTTGCTCCACTGTCTTGCCGCTCTACGCCAAGGCCCTACGTGCT
 CTTCTGCGTGCTCGCCTTCGTGGGCATCCTGGCCGCTATCTGTGCACTCTACGCGCGCATCTACTGCCAGGTA
 CGCGCCAACGCGCGGCGCCTGCCGGCACGGCCCGGACTGCGGGGACCACCTCGACCCGGGCGCGTCGCAAGC
 CGCGCTCGCTGGCCTTGCTGCGCACGCTCAGCGTGGTGCTCCTGGCCTTGTGGCATGTTGGGGCCCCCTCTT
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 TCCTGCGCCTGGTCTGCTGCGGACGCCACTCCTGCGGCAGAGACCCGAGTGGCTCCCAGCAGTCGCGGAGCGC
 GGCTGAGGCTTCCGGGGGCTGCGCCGCTGCTGCCCCGGGCTTGATGGGAGCTTACGCGGCTCGGAGCGC
 TCATCGCCCCAGCGCGACGGGCTGGACACCAGCGGCTCCACAGGCAGCCCCGGTGCACCACAGCCGCCCGGA
 CTCCTGGTATCAGAACCGGCTGCAGACTGA

The following amino acid sequence <SEQ ID NO. 78> is the predicted amino acid sequence derived from the DNA sequence of SEQ ID NO. 77:

MESGLLRPAPVSEVIVLHNYTGKLRGARYQPGAGLRADAVVCLAVCAFIVLENLAVLLVLGRHPRFHAPMFL
 LLGSLTSLDLAGAAYAANILLSGPLTLKLSPALWFAREGGVFVALTASVLSLLAIALERSLTMARGPAPVS
 SRGRTLAMAAAAWGSLLGLLPLALGWNCLGRLDACSTVPLYAKAYVLCVLAFLVGLAICALYARIYCOV
 RANARRLPARPGTAGTTSTRARRKPRSLALLRTLVSLLAFVACWGPLFLLLLLDVACPARTCPVLLQADPFL
 GLAMANSLLNPIIYTLNDRRLHALLRLVCCGRHSCGRDPSGSQASAAEASGGLRRLPPLDGSFSGSER
 SSPQRDLDTSGSTGSPGAPTAARTLVSEPAAD

The following DNA sequence nGPCR-11 <SEQ ID NO. 79> was identified in *H. sapiens*:

ATGTACAACGGGTCGTGCTGCCGCATCGAGGGGACACCATCTCCAGGTGATGCCGCCGCTGCTCATTGTGG
 CCTTTGTGCTGGGCGCACTAGGCAATGGGGTCGCCCTGTGTGGTTTCTGCTTCCACATGAAGACCTGGAAGCC
 CAGCACTGTTTACCTTTTCAATTGGCCGTGGCTGATTTCTCCTTATGATCTGCCTGCCTTTTCGGACAGAC
 TATTACCTCAGACGTAGACACTGGGCTTTTGGGGACATTCCCTGCCGAGTGGGGCTCTTCACGTTGGCCATGA
 ACAGGGCCGGGAGCATCGTGTTCCTTACGGTGGTGGCTGCGGACAGGTATTTCAAAGTGGTCCACCCCCACCA
 CGCGGTGAACACTATCTCCACCCGGGTGGCGGCTGGCATCGTCTGCACCCTGTGGGCCCTGGTCATCCTGGGA
 ACAGCTGATCTTTTGTGAGAGACCATCTCTGCGTGCAAGAGACGGCCGTCTCCTGTGAGAGCTTCATCATGG
 AGTCGGCCAATGGCTGGCATGACATCATGTTCCAGCTGGAGTTCCTTTATGCCCCCTCGGCATCATCTTATTTTG
 CTCCTTCAAGATTGTTTGGAGCCTGAGGCGGAGGCAGCAGCTGGCCAGACAGGCTCGGATGAAGAAGGCGACC
 CGGTTTATCATGTTGGTGGCAATTGTGTTTCATCATGCTACCTGCCAGCGTGTCTGCTAGACTCTATTTCC
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 CATGAACAGCATGCTGGATCCCTGGTGTATTATTTTCAAGCCCCCTCTTTCCCAAATTCACAAAGCTC
 AAAATCTGCACTGAAACCCAAGCAGCCAGACACTCAAAAACACAAAGGCCGAAGAGATGCCAATTTTCA
 ACCTCGGTGCGAGGAGTTGCATCAGTGTGGCAAATAGTTTCAAAGCCAGTCTGATGGGCAATGGGATCCCCA
 CATTGTTGAGTGGCACTGA

The following amino acid sequence <SEQ ID NO. 80> is the predicted amino acid sequence derived from the DNA sequence of SEQ ID NO. 79:

MYNGSCCRIEGDTISQVMPPLLIVAFVLGALGNGVALCGFCFHMKTWKPSTVYLFNLAVADFLLMICLPFRD
 YYLRRRHWAFGDIPCRVGLFTLAMNRAGSIVFLTVVAADRYFKVPHHVAVENTISTRVAAGIVCTLWALVILG
 TVYLLLENHLCVQETA VSCSFIMESANGWHDIMFQLEFFMPLGIILFCSEFKIVWSLRRRQQLARQARMKKAT
 RFIMVVAIVFITCYLPSVSARLYFLWTVPSACDPSVHGALHITLSFTYMNSMLDPLVYVFSSPSFPKFYNKL
 KICSLKPKQPGHKTQRPEEMPISNLGRRSCISVANSFQSQSDGQWDPHIVEWH

The following DNA sequence nGPCR-16 <SEQ ID NO. 81> was identified in *H. sapiens*:

ATGACAGGTGACTTCCCAAGTATGCCTGGCCACAATACCTCCAGGAATTCCTCTTGCGATCCTATAGACACCC
 CACTTAATCAGCCTCTACTTCATAGTGCTTATTGGCGGGCTGGTGGGTGTCATTTCCATTCTTTTCTCCTG
 TGAATGAACACCCGGTCAGTGACCACCATGGCGGTCATTAACCTGGTGGTGGTCCACAGCGTTTTCTGCT
 GACAGTGCCATTTGCTTGACCTACCTCATCAAGAAGACTTGATGTTTGGGCTGCCCTTCTGCAAATTTGTG

anxiety, bipolar disease, epilepsy, neuritis, neurasthenia, neuropathy, neuroses, and the like. Use of nGPCR-x modulators, including nGPCR-x ligands and anti-nGPCR-x antibodies, to treat individuals having such disease states is intended as an aspect of the invention.

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EXAMPLE 4: TISSUE EXPRESSION PROFILING

Tissue specific expression of the cDNAs encoding nGPCR-1, nGPCR-3, nGPCR-9, nGPCR-11, nGPCR-16, nGPCR-40, nGPCR-54, nGPCR-56, and nGPCR-58 was detected using a PCR-based system. Tissue specific expression of cDNAs encoding nGPCR-x may be accomplished using similar methods.

10

Primers were synthesized by Genosys Corp., The Woodlands, TX. PCR reactions were assembled using the components of the Expand Hi-Fi PCR System™ (Roche Molecular Biochemicals, Indianapolis, IN).

nGPCR-1

The RapidScan™ Gene Expression Panel was used to generate a comprehensive expression profile of the putative GPCR in human tissues. Human tissues in the array may include: brain, heart, kidney, spleen, liver, colon, lung, small intestine, muscle, stomach, testis, placenta, salivary gland, thyroid, adrenal gland, pancreas, ovary, uterus, prostate, skin, PBL, bone marrow, fetal brain, fetal liver. Human brain regions in the array may include: frontal lobe, temporal lobe, cerebellum, hippocampus, substantia nigra, caudate nucleus, amygdala, thalamus, hypothalamus, pons, medulla and spinal cord.

15

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Expression of the nGPCR-1 in the various tissues was detected by using PCR primers designed based on the available sequence of the receptor that will prime the synthesis of a 212bp fragment in the presence of the appropriate cDNA. The forward primer was:

25

GCTCAACCCACTCATCTATGCC (SEQ ID NO: 97), and the reverse primer was:

AAACTTCTCTGCCCTTACCGTC (SEQ ID NO: 98)

30

The PCR reaction mixture was added to each well of the PCR plate. The plate was placed in a GeneAmp PCR9700 PCR thermocycler (Perkin Elmer Applied Biosystems). The plate was then exposed to the following cycling parameters: Pre-soak 94°C for 3 min; denaturation at 94°C for 30 seconds; annealing at primer T_m for

disease, epilepsy, neuritis, neurasthenia, neuropathy, neuroses, and the like. Use of nGPCR-11 modulators, including nGPCR-11 ligands and anti-nGPCR-11 antibodies, to treat individuals having such disease states is intended as an aspect of the invention.

- 5 Expression of nGPCR-11 in the thyroid gland, indicates that agonists or antagonists could be of use in the treatment of thyroid dysfunction such as thyreotoxicosis and myxoedema. They could also be of use in the stimulation of thyroid hormone release leading to overall increase in metabolic rate and weight reduction. The expression of nGPCR-11 in liver and muscle indicate a use for
10 agonists or antagonists in regulation of glucose metabolism applicable in diabetes type II.

nGCPR-16

- The RapidScanTM Gene Expression Panel was used to generate a comprehensive expression profile of the putative GPCR in human tissues. Human
15 tissues in the array included, *inter alia*: brain, heart, kidney, spleen, liver, colon, lung, small intestine, muscle, stomach, testis, placenta, salivary gland, thyroid, adrenal gland, pancreas, ovary, uterus, prostate, skin, PBL, bone marrow, fetal brain, fetal liver. Human brain regions in the array included, *inter alia*: frontal lobe, temporal lobe, cerebellum, hippocampus, substantia nigra, caudate nucleus, amygdala,
20 thalamus, hypothalamus, pons, medulla and spinal cord.

 Expression of nGPCR-16 in the various tissues was detected by using PCR primers designed based on the available sequence of the receptor that will prime the synthesis of a 205bp fragment in the presence of the appropriate cDNA. The forward primer used to detect expression of nGPCR-16 was:

- 25 5' CAGCCCAAACATCCAAGTC 3'. (SEQ ID NO: 113). The reverse primer used to detect expression of nGPCR-16 was:

 5' ACCCCACTTAATCAGCCTC 3'(SEQ ID NO: 114).

- For detection of expression within brain regions, the same primer set was used with the Human Brain Rapid ScanTM Panel (OriGene Technologies, Rockville, MD).
30 This panel represents serial dilutions over a 2 log range of first strand cDNA from the following brain regions arrayed in a 96 well format: frontal lobe, temporal lobe, cerebellum, hippocampus, substantia nigra, caudate nucleus, amygdala, thalamus, hypothalamus, pons, medulla and spinal cord.

<213> H.Sapiens

<400> 21

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35          40          45
Gly Val Ile Ser Ile Leu Phe Leu Leu Val Lys Met Asn Thr Arg Ser
50          55          60
Val Thr Thr Met Ala Val Ile Asn Leu Val Val Val His Ser Val Phe
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Leu Leu Thr Val Pro Phe Arg Leu Thr Tyr Leu Ile Lys Lys Thr Trp
85          90          95
Met Phe Gly Leu Pro Phe Cys Lys Phe Val Ser Ala Met Leu His Ile
100         105         110
His Met Tyr Leu Thr Val Pro Ile Leu Cys Gly Asp Pro Gly His Gln
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145

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 Leu Gly Thr Val Tyr Leu Leu Leu Glu Asn His Leu Cys Val Gln Glu
 145 150 155 160
 Thr Ala Val Ser Cys Glu Ser Phe Ile Met Glu Ser Ala Asn Gly Trp
 165 170 175
 His Asp Ile Met Phe Gln Leu Glu Phe Phe Met Pro Leu Gly Ile Ile
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 Leu Phe Cys Ser Phe Lys Ile Val Trp Ser Leu Arg Arg Arg Gln Gln
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 Leu Ala Arg Gln Ala Arg Met Lys Lys Ala Thr Arg Phe Ile Met Val
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 Val Ala Ile Val Phe Ile Thr Cys Tyr Leu Pro Ser Val Ser Ala Arg
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 His Gly Ala Leu His Ile Thr Leu Ser Phe Thr Tyr Met Asn Ser Met
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 Ser Lys Thr Gln Arg Pro Glu Glu Met Pro Ile Ser Asn Leu Gly Arg
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